

WHAT IS CLAIMED IS:

1. An image file selection method of selecting multiple image files available for composing a panoramic image from a plurality of image files, each of the plurality of image files including image data and image attribute information, the image attribute information includes positional information representing a geographical position at a time of photographing, the method comprising the steps of:

(a) reading out the positional information from each of the plurality of image files; and

(b) selecting multiple image files photographed at geographical positions within a predetermined distance as the multiple image files available for composing the panoramic image based on the positional information.

2. The image file selection method in accordance with claim 1, wherein,

the image attribute information further includes image direction information indicative of a geometrical direction of a photographed image,

the step (a) includes the step of reading out the image direction information from each of the plurality of image files, and

the step (b) includes the step of selecting the multiple image files such that an overlap of photographed areas of the multiple image files are larger than a first preset value, the overlap being determined based on the image direction information of the multiple image files.

3. The image file selection method in accordance with claim 2, wherein,

the step (b) further includes the step of:

(b-1) computing a focal length of an optical system used for generation of each image file according to the image attribute information with respect to the each image file;

(b-2) calculating a field angle in a width direction of a image data of the each image file according to the computed focal length with respect to the each image file;

(b-3) specifying the photographed area according to the field angle and the image direction information with respect to the each image file; and

(b-4) selecting the multiple image files such that an overlap of photographed areas in the width direction are larger than a predetermined value, the overlap of photographed areas in the width direction being specified based on the specified photographed areas.

4. The image file selection method in accordance with claim 3, wherein,

the image attribute information further includes a lens focal length, a focal plane resolution unit, and a focal plane width resolution, the lens focal length being an actual focal length of the optical system, the focal plane resolution unit indicating an unit for measuring focal plane resolution, the focal plane width resolution indicating a number of pixels in an image width direction per the focal plane resolution unit on an focal plane of the optical system,

the step (a) further includes the step of reading out the lens focal length, the focal plane resolution unit, and the focal plane width resolution from each of the plurality of image files;

the step (b-1) includes the step of setting the read-out lens focal length to the focal length of the optical system; and

the step (b-2) includes the steps of:

calculating width of the image with respect to each of the image files by dividing the focal plane resolution unit by the focal plane width resolution and multiplying the number of pixels in the image width direction; and

calculating the field angle in the width direction of the image data from the width of the image and the lens focal length with respect to each of the image files.

5. The image file selection method in accordance with claim 3, wherein,

the image attribute information further include a focal length in 35mm film, the focal length in 35mm film indicating an equivalent focal length assuming a 35mm film camera,

the step (b-1) includes the step of setting the read-out focal length in 35mm film to the focal length of the optical system; and

the step (b-2) includes the step of calculating the field angle in the width direction of the image data from the lens focal length and a width of a 35-mm film size image with respect to each of the image files.

6. The image file selection method in accordance with claim 2, wherein,

the step (b) includes the step of specifying an overlap of the photographed areas based on an angle between the geometrical directions of the multiple image files, the angle between the geometrical directions being computed based on the image direction information.

7. The image file selection method in accordance with claim 2, wherein,

the step (b) further includes the step of selecting the multiple image files available for composing the panoramic image if the overlap of photographed areas are larger than the first preset value and smaller than a second preset value.

8. The image file selection method in accordance with claim 1, wherein,

the image attribute information further includes time information indicative of a time of photographing,

the step (a) further includes the step of reading out the time information; and

the step (b) further includes the step of selecting the multiple image files available for composing the panoramic image if a period between the times of photographing is larger than a first preset period and smaller than a second preset period.

9. The image file selection method in accordance with claim 1, wherein,

the image attribute information further includes an exposure program information, exposure time information, shutter speed information, and aperture information, the exposure program information indicating a class of an exposure program used to set exposure for photographing, the exposure time information indicating an exposure time for photographing, the shutter speed information indicating a shutter speed for photographing, the aperture information indicating an aperture for photographing,

the step (a) further includes the step of reading out the exposure program information, the exposure time information, the shutter speed information, and the aperture information from each of the plurality of image files, and

the step (b) further includes the step of selecting the multiple image files such that settings of the exposure time, the shutter speed, and the aperture in a manual mode of the exposure program used for photographing are identical.

10. A computer program product for causing a computer to select multiple image files available for composing a panoramic image from a plurality of image files, each of the plurality of image files including image data and image attribute information, the image attribute information includes positional information representing a geographical position at a time of photographing, the computer program product comprising:

a computer readable medium; and

a computer program stored on the computer readable medium, the computer program comprising:

a first program for causing the computer to read out the positional information from each of the plurality of image files; and

a second program for causing the computer to select multiple image files photographed at geographical positions within a predetermined distance as the multiple image files available for composing the panoramic image based on the positional information.

11. An image file selection apparatus for selecting multiple image files available for composing a panoramic image from a plurality of image files, each of the plurality of image files including image data and image attribute information, the image attribute information includes positional information representing a

geographical position at a time of photographing, the apparatus comprises:

an image attribute information reader configured to read out the positional information from each of the plurality of image files;
and

an image file selector configured to select multiple image files photographed at geographical positions within a predetermined distance as the multiple image files available for composing the panoramic image based on the positional information.